



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,764	11/30/2001	Soon-kyo Hong	1293.1287	4865

49455 7590 05/18/2006
STEIN, MCEWEN & BUI, LLP
1400 EYE STREET, NW
SUITE 300
WASHINGTON, DC 20005

EXAMINER

NGUYEN, TU X

ART UNIT PAPER NUMBER

2618

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/996,764	HONG ET AL.	
	Examiner	Art Unit	
	Tu X Nguyen	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-44 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-44 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In view of the Amendment filed on 3/15/06, have been considered but are persuasive.

In response to Applicants' argument "What remains unclear is why anyone skilled in the art of Alberth would conclude that such a modification of the reference would be beneficial. According to page 3 of the Office Action, this combination would be obvious because one would want to provide that the battery pack and the wireless telephone set of Alberth can protect data stored in the semiconductor memory. However, a simple review of the reference to Alberth reveals that there is no reason to conclude that data stored in the memories 402 and 410 of the main battery 101 and the supplementary module 102, respectively, is ever in danger of being unprotected as suggested. Here, applicants note that Alberth discloses that the supplementary module is used "to avoid interruption in operation" and that the radio telephone "automatically switches between the main battery 101 and the auxiliary battery of the supplemental module 102." In other words, the supplemental module 102 insures that power is available during operation of the radiotelephone and, as a result, data is protected. Thus, the addition of the auxiliary memory of Sawada would be redundant". The Examiner respectfully disagrees, Sawada et al. suggested that a detachable memory can protected data stored in the semiconductor memories of the IC card (see col.1 lines 30-31) which supplied with electric power by the secondary battery (see col.4 lines 8-9). For the purpose of the combination of Sawada and Alberth, Alberth lacks of a detachable memory and Sawada makeup the deficiency by providing a detachable memory for storing character data, image data and audio data (as suggested by Alberth, see col.1 lines 19-20).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 7-10, 14-15, 17-18, 20, 22-24, 31-34, 38-39 and 44, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth, Jr. et al. (US Patent 6,021,332) in view of Sawada et al. (US Patent 6,810,274).

Regarding claims 1, 8, 15, 22 and 44, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and

one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405, fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

said battery includes a memory unit having a built-in main memory (see 402, fig.4).

Alberth, Jr. et al. fail to disclose a detachable auxiliary memory.

Sawada et al. disclose a detachable auxiliary memory (see 3, fig.5 and col.4 lines 19-25). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to

Art Unit: 2618

provide semiconductor memories to store character data, image data and audio data (as suggested by Sawada, see conl.1 lines 19-20).

Regarding claims 2 and 20, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and

one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405, fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

said battery includes a memory unit having a built-in main memory (see 402, fig.4),

Alrberth fails to disclose detachable auxiliary memory and a secondary power output port to connect to and power a controller of another device.

Sawada et al. disclose detachable auxiliary memory (see 3, fig.2) a secondary power output connector to connect to and power a controller of another device (see col.2 lines 10-12, connector is inherent for the battery to supply power to the music playback device). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide the battery pack and the wireless telephone set can protect data stored in the semiconductor memory, as suggested by Sawada (see col.1 lines 64-65).

Regarding claim 9, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and

one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405, fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

said battery includes a memory unit having a built-in main memory (see 402, fig.4),

Alberth fails to disclose detachable auxiliary memory and a secondary power output port to connect to and power a controller of another device.

Sawada et al. disclose detachable auxiliary memory (see 3, fig.2) a secondary power output port to connect to and power a controller of another device (see col.2 lines 10-12, output port is inherent for the battery to supply power to the music playback device). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide the battery pack and the wireless telephone set can protect data stored in the semiconductor memory, as suggested by Sawada (see col.1 lines 64-65).

The modified Alberth, Jr. et al. disclose the first and second battery units are each detachable (see Alberth, col.8 lines 40-41) and further comprises a primary power connection to connect to and power a controller of the electronic device (see Alberth 424, 306, fig.4) and a secondary power output port to connect to a power a controller of another device (see Sawada, col.2 lines 1-9).

Regarding claim 31, Alberth, Jr. et al. disclose an electronic apparatus comprising:

an electronic device including a body (100, fig.1); and

one of at least first and second selectively interchangeable batteries (see col.8 lines 40-44) coupled to the body, the first battery to supply current to said electronic device (see 405, fig.4), the second battery to supply current and to provide information storage to said electronic device (see 413, 410, fig.4).

Alberth, Jr. et al. fail to disclose a detachable auxiliary memory.

Sawada et al. disclose a detachable auxiliary memory (see 3, fig.5 and col.4 lines 19-25). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide semiconductor memories to store character data, image data and audio data (as suggested by Sawada, see concl.1 lines 19-20).

The modified Alberth discloses forming a communication pathway (see Sawada, 18, fig.4) to transfer information between the electronic device and the built in memory unit when the removable memory unit is removed, it the electronic is connected to the second battery.

Regarding claims 3 and 10, the modified Alberth comprises a primary communication connection to connect to said electronic device (see Sawada, 39, fig.8), and a communication port to connect to memory unit to another device to exchange information with the another device (see Sawada, 44, 38, fig.8, col.2 lines 1-2).

Regarding claims 7 and 14, the modified Alberth et al. disclose the main memory is one of a memory chip and a memory card, and the auxiliary memory is the other of the memory chip and the memory card (see Sawada col.3 lines 27-39).

Regarding claim 17, the modified Alberth et al. disclose said electronic device retrieves data over a network (see Alberth, 301, 324, fig.3) and stores the retrieved data in the built in memory unit.

Regarding claims 18 and 23-24, the modified Alberth, Jr. et al. disclose the built-in memory comprises a basic recording capacity for the memory, and the removable memory comprises an increased recording capacity in addition to the basic recording capacity such that the electronic device stores the information independent of whether the auxiliary memory is connected to the battery (see Sawada, col.3 lines 1-2, 29-40).

Regarding claim 32, the modified Alberth, Jr. et al. disclose forming an energy pathway to supply the energy stored in the battery unit to the electronic apparatus while the communication pathway is formed (see Alberth, 448, 427, fig.4).

Regarding claims 33, the modified Alberth et al. disclose connecting another electronic apparatus to the battery (see Sawada, col.2 lines 1-2) and forming another communication pathway between the another electronic apparatus and the one memory unit to transfer information between the one memory unit and the another electronic apparatus (see 45, 44, 3 fig.22).

Regarding claim 38, the modified Alberth et al. disclose detaching the battery from the electronic apparatus and connecting the electronic apparatus to another battery (see Alberth, col.8 lines 40-44).

Regarding claim 39, the modified Alberth et al. disclose another battery includes another memory unit (see Alberth, 402, 410, fig.5).

Regarding claim 34, the modified Alberth et al. disclose both the electronic apparatus and the another electronic apparatus are connected to the battery at the same time (see Sawada, 38, 41, 31 fig.8).

4. Claims 16 and 40, are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert et al., in view of Sawada and further in view of Wang (US Pub. 2003/0013506).

Regarding claim 16, the modified Alberth et al. fail to disclose said electronic device comprise a computer.

Wang disclose said electronic device comprise a computer (see 22, 23, fig.16). therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Wang order to provide the same battery is used for different type of electronic device.

Regarding claim 40, the modified Alberth fails to disclose the another battery does not include another memory unit.

Wang discloses the another battery does not include another memory unit (see 22, fig.8). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Wang in order to provide the batteries are swappable.

5. Claims 6, 13 and 41-43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth, Jr. et al. (US Patent 6,021,332) in view of Sawada et al. (US Patent 6,810,274) and further in view of Miyahshita (US Patent 6,244,894).

Regarding claims 6 and 13, the modified Alberth, Jr. et al. fail to disclose the main memory is detachable from the memory unit.

Miyahshita disclose the main memory is detachable from the memory unit (see col.7 lines 5-14, col.8 lines 1-7). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Miyahshita in order provide compatibility and scalability for the mobile phone.

Regarding claims 41-42, the modified Alberth, Jr. et al. fail to disclose forming another communication pathway such that a detachable one of the memory units is accessible by the electronic apparatus.

Miyahshita disclose forming another communication pathway such that a detachable one of the memory units is accessible by the electronic apparatus (see 13, fig.8). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Miyahshita in order provide compatibility and scalability for the mobile phone.

Regarding claim 43, the modified Alberth disclose the detachable memory unit prior to said attaching the detachable memory unit to the battery (see Miyahshita, 41, fig.8).

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth et al., in view of Sawada, in view of Austin et al. (US Patent 6,590,303) and further in view of Griffith et al. (US Patent 6,917,280).

Regarding claim 12, Alberth et al. disclose a first and second selectively interchangeable (see col.8 lines 40-42) battery units to store power for the electronic device.

Alberth et al. fail to disclose an auxiliary memory that is detachable from said second battery unit, a secondary communication port to connect said memory unit to another device and the communication port is disposed to be flipped out from a body.

Sawada discloses an auxiliary memory that is detachable (see col.1 lines 55-56). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide additional memory for the mobile device.

Austin et al. disclose a communication port between the battery and another device (see 104, fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Austin et al. in order to provide a detachable device from the battery when unused.

Griffith et al. disclose communication port is disposed to be flipped out from a body (col.7 lines 31-32). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth et al. with the above teaching of Griffith et al. in order to provide a micro-size connector to conserve space.

6. Claims 11, 25-30 and 35-37, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberth et al., in view of Sawada and further in view of Austin et al. (US Patent 6,590,303).

Regarding claim 26, Alberth et al. disclose a first and second selectively interchangeable (see col.8 lines 40-42) battery units to store power for the electronic device.

Alberth et al. fail to disclose an auxiliary memory that is detachable from said second battery unit, a secondary communication port to connect said memory unit to another device.

Sawada discloses an auxiliary memory that is detachable (see col.1 lines 55-56).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Alberth with the above teaching of Sawada in order to provide additional memory for the mobile device.

Austin et al. disclose a communication port between the battery and another device (see 104, fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Austin et al. in order to provide a detachable device from the battery when unused.

Regarding claims 11, 25, 27 and 35-37, Alberth et al. fail to disclose said secondary communication port protrudes from the battery to connect to another device.

Austin et al. disclose said secondary communication port protrudes from the battery to connect to another device (see 104, fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Alberth with the above teaching of Austin et al. in order to provide a detachable device from the battery when unused.

Regarding claim 28, the modified Alberth et al. fail disclose a printed circuit board to connect said memory to said communication port. The Examiner takes an Official notice is taken that the concept a printed circuit board for connection between memory and communication port is well known in the art. It would have been obvious a circuit board is useful for interconnection with multiple electronic components.

Regarding claim 29, the modified Alberth discloses the one memory unit comprises a recordable medium housed in a case (see Sawada, fig.8).

Regarding claim 30, the modified Alberth et al. disclose the main memory is one of a memory chip and a memory card, and the auxiliary memory is the other of the memory chip and the memory card (see Sawada col.3 lines 27-39).

7. Claims 19 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (US Pub. 2003/0013506) in view of Sawada et al. (US Patent 6,810,274).

Regarding claim 19, Wang discloses an electronic apparatus comprising:

an electronic device (see 41, fig.16); and

a first and second selectively interchangeable batteries (22, 23, fig.16) coupled to said electronic device.

Alberth, Jr. et al. fail to disclose said battery includes a memory unit having a built-in main memory, and the detachable auxiliary memory and a secondary power output port to connect to and power a controller of another device.

Sawada et al. disclose said battery includes a memory unit having a built-in main memory (see 42, 43 fig.8,), detachable auxiliary memory (see 3, fig.2) a secondary power output connector to connect to and power a controller of another device (see col.2 lines 10-12, connector is inherent for the battery to supply power to the music playback device). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Wang with the above teaching of Sawada order to provide semiconductor memories to store character data, image data and audio data (as suggested by Sawada, see concl.1 lines 19-20).

Regarding claim 21, the modified Alberth, Jr. et al. discloses said battery includes a connector through which a controller of another electronic device is powered by said battery, wherein said battery is attached to said electronic device when the another electronic device is connected to one of the connector and the communication port (see Sawada, col.2 lines 1-2, the music play back device is inherent internally connected to the battery pack, since the claims does not clarify whether the connector is external or internal connector).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883. The examiner can normally be reached on Monday through Friday from 6:30AM-2:30PM.

Art Unit: 2618

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


May 1, 2006


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600